Table: Medical Physicist Involvement in Equipment Adjustments, Changes, or Repairs

For any adjustment, change, or repair not listed in the table below, or if the facility is unsure as to the full extent of the adjustment, change, or repair, the facility should consult their medical physicist to determine the proper extent of his or her involvement in evaluating the item.

| Item | Major Repair | Medical Physicist Involvement |
|---|---|--------------------------------------|
| Automatic Exposure Control | | |
| AEC replacement | Υ | MP conducts evaluation in person |
| Thickness compensation internal* adjustment | N | MP oversight |
| AEC sensor replacement | Υ | MP conducts evaluation in person |
| AEC circuit board replacement | Υ | MP conducts evaluation in person |
| Density control – internal* adjustment | N | MP oversight |
| Bucky (New to Facility) Replacement | | |
| AEC sensor also replaced | Υ | MP conducts evaluation in person |
| AEC sensor not replaced | N | MP oversight |
| FFDM detector also replaced | Υ | MP conducts evaluation in person |
| FFDM detector not replaced | N | MP oversight |
| Filter replacement | | |
| Installation | Υ | MP conducts evaluation in person |
| Reassembly | Υ | MP conducts evaluation in person |
| Manufacturer's software modifications | Υ | MP conducts evaluation in person |
| (see approved alternative standard) | | |
| FFDM detector replacement or repair | Y | MP conducts evaluation in person |
| FFDM Display (monitor)/Printer Replacement | Check FFDM manufacturer's QC manual | Follow FFDM manufacturer's QC manual |
| Collimator | | |
| Replacement | Υ | MP conducts evaluation in person |
| Reassembly with blade replacement | Υ | MP conducts evaluation in person |
| Adjustment | N | MP oversight |
| Compression Device | | |
| Pressure adjustment | N | MP involvement optional |
| Thickness scale accuracy adjustment but only if it affects AEC performance | N | MP oversight |
| Repair of auto decompression | N | MP involvement optional |
| Compression Paddle | | |
| Paddle (new to facility) replacement | N | MP oversight |
| Deflection adjustment | N | MP oversight |
| Adjustment due to extension beyond allowable limit, or visibility on images | N | MP oversight |

X-ray Unit

Faster screen speed

Slower screen speed where the dose increase may exceed 3.0 mGy for the standard breast

| X-ray Unit | | |
|---------------------------------------|---|----------------------------------|
| kVp, mA or time internal* adjustments | N | MP oversight |
| High voltage generator replacement | Υ | MP conducts evaluation in person |
| X-ray tube replacement | Υ | MP conducts evaluation in person |
| | | |
| <u>Darkroom</u> | | |
| Repair of light leaks | N | MP involvement optional |
| Safe light change | N | MP involvement optional |
| | | |
| Film Type/Speed Change | N | MP oversight |
| _ | | |
| Processor | | |
| Chemistry type change | N | MP involvement optional |
| Fixer/Developer replacement | N | MP involvement optional |
| Installation | Υ | MP conducts evaluation in person |
| Reassembly | Υ | MP conducts evaluation in person |
| Replenishment rate adjustment | N | MP involvement optional |
| Roller replacement | N | MP involvement optional |
| | | |
| Cassette Replacement | | |
| Same screen speed | N | MP involvement optional |
| | | |

Ν

Υ

MP oversight

MP conducts evaluation in person